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| APPLICATION NO. | FIL | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|-----------------|------------|-----------|--------------------------|---------------------|-----------------|--|
| 10/022,881 | 12/13/2001 | | James K. Guy | 99-377/009774 4438 | | |
| 7590 04/13/2004 | | | | EXAMINER | | |
| Robert P. Ren | ke | | MAHONEY, CHRISTOPHER E | | | |
| Artz & Artz, P. | C. | | | | | |
| Suite 250 | | | | ART UNIT | PAPER NUMBER | |
| 28333 Telegrap | h Road | | 2851 | | | |
| Southfield, MI | 48034 | | DATE MAIL ED: 04/13/2004 | 1 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Ar | plication No. | Applicant(s) | -OK | | | | |
|--|--|--|---|--|-------------|--|--|--|--|
| Office Action Summary | | | 0/022,881 | GUY, JAMES K. | | | | | |
| | | | aminer | Art Unit | | | | | |
| | • | | ristopher E Mahoney | 2851 | | | | | |
| | The MAILING DATE of this commu | | | <u> </u> | ldross | | | | |
| Period fo | | ncadon appears | on the cover sheet with | ir the correspondence ad | 47000 | | | | |
| THE I - Exter after - If the - If NO - Failui Any r | DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN usions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply specified above is less than thirty (3 period for reply is specified above, the maximum signified above is less than third the maximum signified above. Output DRTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN SIX (6) MONTHS from the mailing date of this complete signified above is less than third the maximum signified above is less than third (6). | ICATION. s of 37 CFR 1.136(a). nunication. s0) days, a reply withi atutory period will ap v will, by statute, caus | In no event, however, may a re in the statutory minimum of thirty ply and will expire SIX (6) MONT the the application to become ABA | ply be timely filed (30) days will be considered timely THS from the mailing date of this continued the mailing date of the mailing da | | | | | |
| Status | | | | | | | | | |
| 1)⊠ | Responsive to communication(s) file | ed on <i>21 Novei</i> | mber 2003. | | | | | | |
| - | • | | ion is non-final. | | | | | | |
| • — | | , | | ers, prosecution as to the | e merits is | | | | |
| ٥/١ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| | | | | , | | | | | |
| Dispositi | on of Claims | | | | | | | | |
| • | Claim(s) is/are pending in the application. 4a) Of the above claim(s) <u>1-5,9-13 and 17-22</u> is/are withdrawn from consideration. | | | | | | | | |
| • | | | | | | | | | |
| •— | Claim(s) is/are allowed. | | | | | | | | |
| 6)⊠ | Claim(s) <u>1-5,9-13 and 17-22</u> is/are rejected. | | | | | | | | |
| • | Claim(s) is/are objected to. | | | | | | | | |
| 8)[| Claim(s) are subject to restri | ction and/or ele | ection requirement. | | | | | | |
| Applicati | on Papers | | | | | | | | |
| 9)□. | The specification is objected to by the | e Examiner. | | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | | | |
| , | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11)[] 1 | 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| ŕ | - | • | | | | | | | |
| - | nder 35 U.S.C. § 119 | | · | 440() ()) (0) | | | | | |
| a)[| Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internations the attached detailed Office actions. | documents ha documents ha of the priority o onal Bureau (Po | ve been received. ve been received in Ap documents have been i CT Rule 17.2(a)). | oplication No received in this National | Stage | | | | |
| Attachment | :(s) | | | | | | | | |
| | e of References Cited (PTO-892) | | | ummary (PTO-413) | | | | | |
| | e of Draftsperson's Patent Drawing Review (I | | |)/Mail Date formal Patent Application (PT0 | D-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | | | | |

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DETAILED ACTION

Response to Arguments

In view of the supplemental appeal brief filed on November 21, 2003, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

The applicant argues that the pins originate from the diaphragm. This is not found in the claims. Reciting that "a first portion of at least of the .. diaphragm leaves coupled to the stator" does not mean that the pin originates from the diaphragm. It just means that it is coupled to the stator. It could be coupled to the stator via a pin originating from the stator.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters 38 and 39 have both been used to designate pins. It is understood that 39 and 41 are different sets of pins and that all pins, both 39 and 41 are subsets of pins 38.

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However, figure 2 shows a pin in the upper left designated as both 38 and 39 without showing that the pin in the lower right is both pin 38 and 41.

The applicant is respectfully requested to add drawings illustrating the pin positions and the leaf positions in 2-3 different states of opening. It is unclear from the description and the drawings how the leaves of the diaphragm will rotate if the leaf is connected to both the rotor and the stator without a slot for sliding one of the pins.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5,9-13 and 17-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, it is unclear from the specification and drawings how the leaves will rotate. For example if a leaf is attached to both the rotor and stator through pins 39 and 41 and there is no slot for either pin to slide, it is unclear how the leaf will rotate so as to form a variable opening 20. If both the rotor and stator rotated in the same direction at the same rate the leaf would also rotate but would not result in a varied opening.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9-13, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by

Devenyi (US Patent 5,955,806). Devenyi discloses a torque motor having an annular,

cylindrically symmetric stator and rotor. The stator 30 includes a frame and multiple annular

magnet members 32 (See Figure 6). The annular magnet members comprise a plurality of

magnets mounted on various portions (or annular elements) of the annular stator. (See Figure

The stator frame comprises an inner wall (first annular member) and an outer wall (second outer

wall). The base of the stator functions as a sidewall. The rotor 22 is rotatably coupled to the

annular magnet member 32 and defines a channel 68. The device of Devenyi further comprises a

diaphragm coupled to the stator via pin 65 and to the rotor via pin 64. The diaphragm includes

leaves 63 pivotally arranged to form an adjustable aperture concentric with the channel. Devenyi

also discloses a light sensor 72, sensor electronics 76 and a motor controller (actuator) 80 for

detecting the light intensity passing through the aperture. This data is then sent to the electronics

and motor controller (logic) to control the iris/diaphragm via leads 26. (Column 4, lines 6-22).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Devenyi (US Patent 5,955,806) in view of Hoesterey (U.S. Patent No. 4,034,949) or Prince (U.S. Patent No. 4,050,085. Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a telescope. Both Hoesterey and Prince teach that it was known to use an iris in a telescope. The applicant is directed to review col. 2, lines 50-54 of Hoesterey and col. 7, lines 46-48 of Prince. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Scruggs or Bellows for the purpose of controlling the amount of light per unit of time.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Devenyi (US Patent 5,955,806) in view of Suzuki (U.S. Patent No. 4,378,146). Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a camera. Suzuki teaches that it was known to use an iris (col. 2, line 68) in a camera (col. 3, line 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Suzuki for the purpose of controlling the amount of light per unit of time.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Devenyi (US Patent 5,955,806) in view of Scruggs (U.S. Patent No. 3,876,008) or in view of Bellows (U.S. Patent No. 4,790,194). Devenyi teaches the salient features of the claimed invention except for the face that the iris is used in a pipe. Both Scruggs and Bellows teach that it was known to use

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an iris in a pipe. The applicant is directed to review col. 3, lines 28-31 of Scruggs and col. 4, lines 4-7 of Bellows. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the features taught by Scruggs or Bellows for the purpose of controlling the amount of water flow.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher E Mahoney whose telephone number is (571) 272-2122. The examiner can normally be reached on 8:30AM-5PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (571)272-2112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher E Mahoney

In Ede

Primary Examiner Art Unit 2851